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(54) CONTENTS INFORMATION DISTRIBUTION SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a contents information distribution system capable of easily acquiring the contents of information by storing an image e.g. to be the contents of information as right in a fixed storage means as right information so as to optionally take it out and allowing a third person to read out and use it only by necessary volume as necessity and pay out a rental fee to a rightful claimant in accordance with its using format.

SOLUTION: The system consists of means 1, 2 for collecting the contents of information and creating new information, a means 3 for storing the whole created contents or dividing the whole contents into plural areas as necessity, annexing identification(ID) codes to respective areas and storing the contents of the information provided with the ID codes so as to optionally read it out, a means 4 for transmitting the contents of the information from the storing means 3, and a display means 5 for reproducing the contents of the transmitted information.
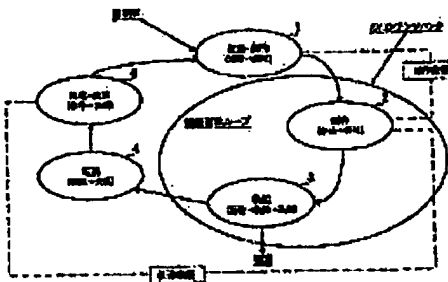
CLAIMS

[Claim(s)]
[Claim 1]A contents information distribution system comprising:
A means to collect contents of information and to create new information.
A means to memorize contents of information to which an identification signal was given while
carrying out area division of created whole contents or its whole contents if needed and
attaching an identification signal to each free [a drawer].
A means to transmit contents of information from a memory measure.
A displaying means reproducing contents of transmitted information.

[Claim 2]A contents information distribution system comprising:
A means to collect contents of information and to create new information.
A means to memorize contents of information to which an identification signal was given while
carrying out area division of created whole contents or its whole contents if needed and
attaching an identification signal to each free [a drawer].
A drawer means which pulls out contents of information from a memory measure.
A means to charge according to a using form of pulled-out information.

[Claim 3]A contents information distribution system comprising:
A means to collect contents of information and to create new information.
A means to code the created new information.
A means to transmit coded information.
A means to memorize only a required thing among transmitted information and to cancel except
it, a means to transmit information more nearly required than a memory measure, and a means
that carries out decoding of the transmitted information.

[Claim 4]A contents information distribution system which provides necessary contents
information from a contents information donor suitably to a contents information user via a data
transmission line, comprising:
A storage control means which is prepared for said contents information donor and makes a
memory measure memorize a component (the following, information, or component) of the
created information itself or the information concerned.
It is prepared for said contents information donor and according to a demand from a contents
information user, A transmission control means which pulls out necessary information or a
component from said memory measure, and is transmitted to a contents information user by
making these into contents information, and a reappearance means to reproduce contents
information which was prepared for said contents information user and transmitted by contents
information donor according to a demand.

[Claim 5]The contents information distribution system according to claim 4, wherein said
contents information donor possesses an incorporation means to incorporate created
information from a contents information creator via said transmission line.

[Claim 6]The contents information distribution system according to claim 4 or 5 said storage control means's performing predetermined processing and processing of edit, and making a memory measure memorize it to information or a component incorporated from a contents information creator.

[Claim 7]The contents information distribution system according to claim 4 or 5 said storage control means's attaching an identification signal, and making a memory measure memorize it to said information or a component.

[Claim 8]The contents information distribution system according to claim 4 or 5 said storage control means's attaching utilization charge information, and making a memory measure memorize it to said information or a component.

[Claim 9]The contents information distribution system according to claim 4 or 5, wherein said transmission control means has the function to transmit contents information which consists of information corresponding to a demand from a contents information user, or trial information about a component to said contents information user.

[Claim 10]The contents information distribution system according to claim 9, wherein said trial information is that by which at least one processing of deteriorating treatment of quality, limited processing of the contents, and limited processing of duration of service is made about information or a component corresponding to a demand from a contents information user.

[Claim 11]Claim 4 which carries out the feature of said transmission control means performing and transmitting a predetermined conversion function to contents information, and said reappearance means possessing a function which carries out restoration processing of the transmitted contents information, the contents information distribution system according to claim 5 or 9.

[Claim 12]Claim 4, wherein said transmission control means has the function to perform accounting to a contents information user about contents information who transmitted, Claim 5, the contents information distribution system according to claim 9 or 11.

[Translation done.]

* NOTICES *

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]This invention saves the picture which is contents of the information as a
right free [a drawer] as right information data at the fixed memory measure, When required,
only a complement pulls out and uses it, and a third party is related with the contents
information distribution system of paying a right holder a usage fee according to the using form.
[0002]
[Description of the Prior Art]having accomplished the further development by a highly
informative society's providing society with many information including art (dispatch of
information), and selecting it freely -- being also indistinguishable -- it is a fact which is not.
high-tech industry, therefore apparatus with new progress of art are made, new needs are born
from there, the relation of making a new method is repeated, new media are developed and put in
practical use, and especially the thing called electronic media is spreading and developing.
[0003]By the way, the information which will be the requisite for its spread and development and
the contents which will be contents of information if it says further, It has succession nature for
required information stably and safely simply at a place required when required, and trouble is
not made to people, "it can deliver and receive" at a proper fee, and it becomes an important
thing to tie to new "work" using it, and to go.
[0004]For example, although the broadcasting system which makes radio and television a subject
has the outstanding function which provides the public with information, including a news, a
sport, etc., by low cost promptly, on the other hand, it has an essential weak point which cannot
be seen other than the specific time which the informer decided about the drama or the movie.
Then, home VTR has improved this weak point in the form of time shifting, and it was set to one
of the smashing success goods also in AV household appliance goods. This is an improvement of
requirements [in the requirements for above mentioned spread and development / "when
required"].
VOD [what / has improved this requirement further and raised completeness] using a telecom
infrastructure (it can be called a Video On Demand" system.).

[0005]If it tries to return and is in a highly informative society, dispatch serves as the point with
diversification of contents, therefore reception of information.
[0006]what will be in a future highly informative society and will not have information dispatch if
it says -- existence value -- ***** -- since it becomes things, desire of information dispatch
will increase inevitably.
[0007]Work of the information using those contents and the environmental management of signal
transduction are urged to a rise of desire of this information dispatch, and it serves as a form
dispatch of information is very apt to perform as a result.
[0008]Diversification of the Audio Visual contents (AV content is called hereafter) which have
electronic media especially an ordinary home, and a close relation is urged to progress of the
environmental management of information work and signal transduction, and it is shifting to a
produced-a wide variety type time from a small variety mass production type.

[0009]And AV content shifts to selection from forced, and the paradigm shift is carried out from the time of advertisement to the time of search.

[0010]By the way, although the incentive of information dispatch is given by acquisition (I would like to obtain profits by offer of information) of the contribution (I would like to contribute to world for it to be helpful to people in) ** remuneration to ** self-actualization (I would like to get to know and get my idea, feeling, works, etc.) ** society, etc., a technical developing theme occurs in one side.

[0011]Namely, the environmental management in the case of transmitting important information is it, and the 1, a search service (existence of information is told and got to know) ― the 2 ― an accounting function (collection of a just fee) ― the 3 is an Audio Visual server function (an AV server function is called hereafter) (it responds to many and unspecified accesses).

[0012]On the other hand, it set by the present, and on the other hand, the general public who is a recipient of information received broadcast etc. on the target, and was able to do only usage in the gestalt of enjoying it, for example.

[0013]. However, cooperation should do as competition under the rule of a cosmopolitan by globalization, i.e., economic borderless-izing. By rapid progress of digital art, various Data Processing Division and transfer can carry out now at the common base of digital one, and the efficiency of Data Processing Division and transfer is increasing by leaps and bounds, By progress of maintenance of information and telecommunications infrastructures, such as the Internet, when the exchange of information and communication are expanded, the general public who was a receiving speciality is becoming an addresser of information countless as a small-scale group as an individual on a network.

[0014]
[Problem(s) to be Solved by the Invention]By the way, the present age has encouraged creation of new art by giving industrial rights, such as a patent right as fixed time exclusive rights, in compensation for public presentation to the creator of new art for the purpose of contributing to development of industry.

[0015]Although this system is functioning very well and has contributed to development of industry greatly, on the other hand, it is a place which that there is a fact that it cannot necessarily be used easily cannot deny, either to carry it out.

[0016]It considers it as a right holder's expectation, and is considered that the problem of gap with a user's expectation, the difficulty of infringement discovery, etc. are making the cause.

[0017]However, if the present society has, as described above, by progress of maintenance of information and telecommunications infrastructures, such as the Internet. The general public who was a receiving speciality when the exchange of information and communication were expanded on a network as an individual, From the place which has been increasing as an addresser of information countless as a small-scale group, a right holder does not agree in the present age globalized if persisted only in the self scope of right.

[0018]This invention by connecting by network the addressers of the information which exists innumerably via the feeding means contents (contents of information) were remembered to be (accumulation), The new art which was selected and was born out of it (feeding means), Become a number to the extent that imagination is also also impossible, and it is expected that progress of the art accompanying it and its speed also increase at an increasing tempo, Therefore, it is what has left recognition that it will not have agreed in a trend of the times if it has stopped at the conventional idea, For example, the picture which is contents of the information as a right is saved free [a drawer] as right information data at the fixed memory measure, When required, only a complement used to pull out and use it, and a third party used to solve by providing the contents information distribution system of paying a right holder a usage fee according to the using form.

[0019]
[Means for Solving the Problem]In order to attain the above-mentioned purpose, an invention of Claim 1, A means to memorize contents of information to which an identification signal was given free [a drawer] while carrying out area division of created whole contents or its whole contents to a means to collect contents of information and to create new information, if needed and

attaching an identification signal to each, It consists of a means to transmit contents of information from a memory measure, and a displaying means reproducing contents of transmitted information.

[0020]A means for an invention of Claim 2 to collect contents of information and to create new information, A means to memorize contents of information to which an identification signal was given free [a drawer] while carrying out area division of created whole contents or its whole contents if needed and attaching an identification signal to each, It consists of a drawer means which pulls out contents of information from a memory measure, and a means to charge according to a using form of pulled-out information.

[0021]A means for an invention of Claim 3 to collect contents of information and to create new information, It consists of a means to code the created new information, a means to transmit coded information, a means to memorize only a required thing among transmitted information and to cancel except it, a means to transmit information more nearly required than a memory measure, and a means that carries out decoding of the transmitted information.

[0022]Contents information distribution system of this invention which provides necessary contents information from a contents information donor suitably to a contents information user via a data transmission line is characterized by that an invention of Claim 4 comprises the following.

A storage control means which is prepared for said contents information donor and makes a memory measure memorize a component (the following, information, or component) of the created information itself or the information concerned.

A transmission control means which it is prepared for said contents information donor, and pulls out necessary information or a component from said memory measure, and is transmitted to a contents information user by making these into contents information according to a demand from a contents information user.

A reappearance means to reproduce contents information which was prepared for said contents information user and transmitted by contents information donor according to a demand.

[0023]In an invention of Claim 5, in Claim 4, said contents information donor possesses an incorporation means to incorporate created information from a contents information creator via said transmission line.

[0024]An invention of Claim 6 performs predetermined processing and processing of edit, and makes a memory measure memorize said storage control means in Claim 4 or 5 to information or a component incorporated from a contents information creator.

[0025]An invention of Claim 7 attaches an identification signal and makes a memory measure memorize said storage control means to said information or a component in Claim 4 or 5.

[0026]An invention of Claim 8 attaches utilization charge information, and makes a memory measure memorize said storage control means to said information or a component in Claim 4 or 5.

[0027]An invention of Claim 9 has the function to transmit contents information which said transmission control means becomes from information corresponding to a demand from a contents information user, or trial information about a component to said contents information user, in Claim 4 or 5.

[0028]An invention of Claim 10 is characterized by said trial information being that by which at least one processing of deteriorating treatment of quality, limited processing of the contents, and limited processing of duration of service is made about information or a component corresponding to a demand from a contents information user in Claim 9.

[0029]In Claim 4, Claim 5, or Claim 9, said transmission control means performs a predetermined conversion function to contents information, an invention of Claim 11 transmits, and the feature of said reappearance means possessing a function which carries out restoration processing of the transmitted contents information is carried out.

[0030]An invention of Claim 12 has the function to perform accounting to a contents information user about contents information who transmitted said transmission control means, in Claim 4, Claim 5, Claim 9, or Claim 11.

[0031]
[Embodiment of the Invention]Hereafter, an embodiment of the invention is described with reference to Drawings. Drawing 1 is a block diagram showing notionally the embodiment of the contents information distribution system of this invention.

[0032]In the figure, 1 is creation means, such as a camera, for example, incorporates the image which is contents of information from a nature as a raw material, and records it. If it is in a sound, this serves as a microphone. It may be a home server etc.

[0033]2 is a work means for finishing the incorporated above-mentioned information as a work, for example, edit, coding, etc. are performed here.

[0034]ROM/RAM 3 remembers the contents of information to be free [a drawer]. It is a server's etc. memory measure, and the work made by the work means of 2 is accumulated, or area division of the created whole contents or its whole contents is carried out if needed, and an identification signal is attached to each for search. And the kind of information which should be accumulated can divide roughly into an animation, Still Picture Sub-Division, a character, data, and voice correspondence. Among these, generally an animation and the sound need to have and treat real time nature, and Still Picture Sub-Division, a character, and data do not require real time nature. In many cases, an animation and data have the large amount of information, and others are not so big the amount of information.

[0035]Here, it is divided into the video server which can treat an animation, and the data server treating data as a server, and a sound will live together to a video server and Still Picture Sub-Division and a character will usually live together to a data server. Even if it accumulates all of these information in the same server, it is good natural.

[0036]As a video server, although there are "file transfer type" and "real-time-transfer type", when not accompanied by complicated operation of animation processing etc. by a receiver, a real-time-transfer type becomes advantageous by a cost aspect.

[0037]In this memory measure, the accounting information for charging according to the using form of the contents of information pulled out by the demand from a third party can be added.

[0038]As for this memory measure 3 and third party, although not illustrated, it is needless to say that it is connected by network with the terminal equipment.

[0039]Even if a means to charge is out of this memory measure 3, it is good natural. It is a transmission means which consists of a cable or radio, and 4 has only required information transmitted from the memory measure 3, for example, and it becomes irregular and gets over and it multiplexes this, for example.

[0040]As transmission art, although it can divide roughly into cable-transmission art and wireless transfer art, about strange recovery art, many common appearances are included by a cable and radio.

[0041]It is divided further whether although cable-transmission art can be classified into a metal cable and an optical fiber cable according to transmission-medium correspondence, it is transmitted by the on-off signal of 1 and 0, or the inside of the limited frequency band is transmitted with a multi valued signal.

[0042]Wireless transfer art is transmission band correspondence, it can classify into lights, such as the usual electric wave and infrared rays, and this is also divided into on-off-signal transmission and multi valued signal transmission.

[0043]Among these, although infrared transmission can be called method which suited from it being hard to receive restrictions of radio law, correspondence supposing a millimetric wave band will be needed in the future.

[0044]Next, although it is strange recovery art, many can be applied common to a cable transmission and wireless transfer, and especially an important thing is the high efficiency strange recovery art of treating a multi valued signal.

[0045]There are QAM, OFDM, CDM, etc. as high efficiency strange recovery art. In order to ease the influence of the multipass in wireless transfer especially, OFDM and CDM are effective, and application of OFDM and CDM is effective also in an inferior transmission system.

[0046]Although it is not the transmission art itself, the digital-error correction art in a transmission line, the encoding technology of tapping or illegal copy prevention, ID (individual

recognition) art of making a code and a pair, etc. are important.

[0047]5 is a displaying means of a display etc. and is displayed as required information by carrying out decoding of the information transmitted from the transmission means 4, for example, for example.

[0048]And the information from this displaying means is again fed back to a creation means etc.

[0049]As other displaying means, there are a decoder (it corresponds to a highly efficient encoder), a loudspeaker, and a disk player.

[0050]Next, concrete composition and function of a contents information distribution system which was mentioned above are explained still in detail, referring to Drawings.

[0051]Drawing 2 is a block diagram showing the entire configuration at the time of applying the contents information distribution system shown in drawing 1 to an AV content distribution system of information. The AV content bank (henceforth, contents bank) 11 as which this system 10 functions as a contents information donor, A contents information creator's terminal system (the following, content registrant) 12, It comprises a contents information user's terminal system (the following, contents user) 13, the financial institution 14 which functions as an execution medium of accounting, and the network 15 as a transmission medium which transmits various kinds of information, messages, etc. including contents information.

[0052]The above-mentioned contents bank 11, the content registrant 12, and the contents user 13, For example, input devices, such as a keyboard, a mouse, a light pen, or a flexible disk unit, It is connected to the network 15 via the usual computer system containing output devices connected to CPU (central processing unit) and this CPU, such as recorders, such as ROM, RAM, and a magnetic disk, a display device, and a printer. Especially the various function of the contents bank 11 mentioned later is realized on the computer system provided with the database.

[0053]The contents user's 13 computer system, Provide the function of a reappearance means to reproduce the contents information transmitted through the network 15 from the contents bank 11, and the computer system of the contents bank 11, The function of an incorporation means to incorporate the contents transmitted through the network 15 from the content registrant 12 is provided.

[0054]Next, in the system constituted like drawing 2, the contents which the content registrant 12 newly created are saved free [a drawer] on the contents bank 11, When the information which the contents user 13 needs is used having pulled it out as contents information, The contents information distribution system that the contents user 13 pays the content registrant 12 the usage fee according to the using form via the contents bank 11 and the financial institution 14 is explained.

[0055]1. Work of contents and the registration content registrant 12 collect a picture and sounds, for example using a video movie, a still picture camera, a voice recorder, etc., and make contents by giving edit work which a content registrant individual considers to these pictures or a sound. And the made contents are registered to the contents bank 11 through the network 15.

[0056]Three databases are prepared for the contents bank 11. That is, it is the contents user management data base 18 which manages the information about the content registrant management data base 16 which manages the information about the content registrant 12, the contents database 17 which manages contents by a file format, and the contents user 13.

[0057]If contents are sent from the content registrant 12, information, including a registrant (content registrant), the contents of registration, the method of paying, etc., will be registered into the content registrant management data base 15 (divided into an animation, Still Picture Sub-Division, and a classification item). An example is shown below.

[0058](1) A registrant's information name, age, an address, an occupation, sex, a telephone, a mail address, The method (2) registration contents information registration title name, file capacity to pay, (4) registration content-use-information use day, such as a data format and an information new (change) title name after registration date (3) registration contents processing / edit, In a title name, a fee, an addition fee, payment execution time, and the amount-of-payment contents bank 11. For example, by opening the homepage for contents registration / use on the Internet, use of content registrant 12 and contents user 13 both sides can be made easy. And

when attested as a registrant in the content registrant 12 inputting the above information, the registrant's contents will be registered to the contents database 17. The contents data veil 17 as a recording control means is equipped with the information work means and editing means which perform processing and edit of contents and which are not illustrated, and processing and edit of contents are carried out if needed. As said information work means and an editing means, the existing editing device can also be used, for example, and the software for image editings etc. which are used on a computer system can be used. According to those contents, the level division of processing and the edit at this time is carried out. An example is shown below.
[0059](1) Those without processing / edit (2) Easy filters (noise reduction, edge enhancement, a gamma correction, etc.)
(3) Parts-izing using some edit (4) contents of title addition, partial deletion, an effect, etc., When saving parts-izing by object-izing, and solidification contents at the content registrant management data base 15, the above-mentioned processing / edit level is added to the file prepared for every contents as additional information. This additional information is used as judgement factors of the fee paid to a content registrant at the time of fee collection.
[0060]Here, the examples of a database register are explained to be processing and edit of the registered contents.
[0061]Drawing 3 is an explanatory view showing an example of the contents sent by the content registrant 12. Drawing 3 (a) shows original contents. Since these contents comprised two or more objects, drawing 3 (b) and (c) separated and (processing) parts-ized this for every object. When registering contents as shown in these drawing 3 (a), (b), and (c) as registration contents information of the content registrant management data base 16, a new (change) title name like ABCD-1 and ABCD-2 is attached to the parts-ized object. Parts-izing of contents is automatic on the content registrant's 12 demand or the basis of comprehension, or is manually performed on it. In order to carry out automatically, it carries out, for example by method [, such as the QBIC method (IBM registered trademark), the Illustra&VIR method (virage), the VisualSEEK method (U.S. Columbia University), the VP method (University of Tokyo), and ExSight (NTT),] and MPEG7.
[0062]The picture information about the component of (a) as shown in the created information itself as shown in drawing 3 (a), and drawing 3 (b) and (c) is accumulated, and also the following information is added to the contents database 17 as an identification signal used in the case of search. An example is shown below.
[0063](1) the keyword for a registrant name, an initial title name, processing and an editorial-contents (2) new title name, the capacity of a file, the registration date to a data format (3) contents bank, and fee (4) search — for example, When registering the parts-ized contents as shown in drawing 3 (b) and (c) into the contents database 17, information as shown in drawing 4 (a) and (b) is registered.
[0064]The following use contents information is registered into the contents user management data base 18. An example is shown below.
[0065](1) the collection day of a user's information user name, a use title name, use time (2) utilization-charge information rental spending, and addition rental spending (3) rental-spending collection information addition rental spending, and a collected amount — here, The flow of a series of work from work of the contents by a content registrant to contents bank registration is explained using the flow chart of drawing 5. However, work contents and an order change with actual system management.
[0066]First, the content registrant 12 collects the raw materials which become the origin of contents (Step 101), and next he makes contents (Step 102), the homepage of the contents bank 11 is accessed (Step 103), and he performs a registration procedure on a homepage (Step 104). At this time, the image data of this humanity news and contents, etc. are sent to the contents bank 11 through the network 15. Next, in the contents bank 11, various kinds of information that it was inputted on the occasion of a registration procedure is registered into the content registrant management data base 16 (Step 105). And processing and edit of the registered contents are performed (Step 106). Additional information is attached to the contents processed and edited, and it registers to the contents database 17 (Step 107). Then, registration

information is connected to a registrant.

[0067]The contents registered into the contents database 17 of the contents bank 11, It is a stage where it is fundamentally accumulated in one data format to the same contents, and the contents user 13 chooses and acquires contents, The data format conversion means (not shown) which changes and sends out the data read from the contents database 17 to the data format of hope in real time is established. According to this, it can be made to correspond to various data formats for which the contents user 13 wishes, such as changing into the data format of JPEG the image data accumulated in the for example comparatively high-definition BMP file server, and sending it out. The data which equips the contents bank 11 with coding/composite-ized means (not shown) for example, in which video is accumulated by MPEG 2 like MPEG1, MPEG4, or wavelet, It is convertible for the encoding rate which the contents user 13 wishes (in this case, data volume can be changed). Thus, it can change and supply with the data volume which is a data format for which the contents user 13 wishes, and wishes for contents information.

[0068]2. Explain a series of flows from acquisition of contents, fee collection, next acquisition of the contents by a contents user to fee collection using the flow chart of drawing 6. However, work contents and an order change with actual system management.

[0069]First, the contents user 13 accesses the homepage of the contents bank 11 (Step 201), and performs search for contents acquisition on a homepage (Step 202). For example, in search of the acquisition button of contents, it clicks from a homepage, or searches by the search of contents made into the purpose from the selection picture according to field, or the ambiguous retrieval by a keyword input. If the target contents are obtained by search, the item and thumbnail image which were searched, and contents explanation will be displayed (Step 203). A thumbnail image is a small picture image showing contents, and contents explanation is a title name, file capacity, a data format, etc. When the target contents are obtained by search, the contents user 13 ends search, progresses to the following step (it is Yes at Step 204), and when the target contents are not obtained, he returns to No) and Step 202 at the (step 204.

[0070]The contents user 13 chooses the contents needed out of a retrieval item, after search is completed. If a data format and data volume need to be changed at this time, it will be specified and contents will come to hand (Step 205). In the contents bank 11, from the contents name incorporated into the contents user 13, the use price is checked and it records on a contents user management data base as use contents information. Simultaneously, registration content use information is recorded on the content registrant management data base 16 (Step 206). After that, use expense is periodically collected from the contents user 13, and use expense is periodically paid to the content registrant 12 (Step 207).

[0071]from the account of the contents user 13 by whom collection of use expense is registered into the financial institution 14, for example — being periodical (for example, 1 time of every month) — it carries out by pulling down etc. And after collection of use expense records the clearance of the addition rental spending currently recorded on the contents user management data base 18, and that collection was performed. The networks 15 (or mailing etc.) inform the contents user 13 of the details of the collected use expense. the content registrant's 12 account registered into the financial institution 14 on the other hand, for example in the amount of money according to the addition fee by which the payment of use expense is recorded on the content registrant management data base 16 — being periodical (for example, 1 time of every month) — it carries out by transferring etc. And after the payment of use expense records the time which paid with the clearance of the addition fee currently recorded on the content registrant database 16, and made a frame and payment. The networks 15 (or mailing etc.) inform the content registrant 12 of the details of the paid use expense.

[0072]Added value is attached to contents by performing processing, edit, etc. to the registered original contents, as mentioned above, And it can be satisfied with managing so that the fee according to the contents of the registered contents, a level, etc. may be paid to a content registrant of desire of a content registrant's self-actualization etc., and new creation volition can be evoked by it. By on the other hand supplying high quality contents to a contents user (other content producers), Circulation of various contents work becomes smooth and the AV content

distribution system of information corresponding to the present network age when contents with high-level quality and quantity are called for can be provided.

[0073]Next, various contents registered into the contents bank 11 are explained to the contents user 13 about the example in the case of making trial offer.

[0074]When the contents user 13 searches desired contents from the contents bank 11, accompanying information, such as a title, an outline, and a keyword, is shown as contents explanation. However, in AV content, the contents may fully be unable to grasp only by these accompanying information. In especially processing it, editing and making new contents, unless it actually incorporates and sees the effect in the inside of the whole, and matching, there is no telling whether to be contents for which it asks truly, in many cases. Then, quality restrictions, contents limitation, a limited time offer, etc. are restricted to the contents information distributed first, and it enables it to use the contents of which those restrictions were canceled after fee collection in this AV content distribution system of information. Hereafter, the concrete embodiment of a trial providing means which mainly performed quality restrictions is described.

[0075][Embodiment 1] Drawing 7 is a block diagram showing the composition in the case of making trial offer of the compression coded data of a low resolution. The contents incorporated into the contents bank 11 are accumulated in the contents database 17, after predetermined processing and edit are performed. this time — an input picture signal — the two coding equipment 21 and 22 — graphical data compression (DCT transformation.) It quantizes, variable length coding is carried out, one side is accumulated as high resolution compression coded data, by LPF(low pass filter) 23, a high-frequency component is omitted and another side is accumulated as low resolution compression coded data. Two data in which resolution differs about the same contents by this is stored. That is, the low resolution compression coded data to which the quality of the picture was lowered is accumulated as distributes data for trial offer, and high resolution compression coded data is accumulated as distributes data at the time of formal purchase.

[0076]If the sending-out request from a contents user is inputted into the controller 24, low resolution compression coded data will be first distributed as distributes data for trial offer of applicable contents. A contents user examines whether the contents of contents are checked with the data of a low resolution, and it purchases. And if formal purchase is decided and a sending-out request is inputted again, high resolution compression coded data will be distributed as distributes data at the time of formal purchase. Also in the case of voice data, this embodiment is applicable.

[0077][Embodiment 2] Drawing 8 is a block diagram showing the composition in the case of distributing only the difference data of high resolution and a low resolution at the time of formal purchase. Identical codes show drawing 7 and the equivalent portion of Embodiment 1.

[0078]The contents incorporated into the contents bank 11 are accumulated in the contents database 17, after predetermined processing and edit are performed like the embodiment described previously. As for an input picture signal, at this time, a perpendicular direction and a horizontal direction are respectively band-limited to a 1/N grade according to subsampling in the subsampler 25 by LPF23. In the subsampler 25, a pixel is respectively thinned out by 1/N (a pixel number dropped), and a perpendicular direction and a horizontal direction serve as a picture of a low resolution, and are given to the coding equipment 22 and the interpolator 26. In the interpolator 26, the pixel which was thinned out and lost is interpolated, and it becomes the interpolation signal which is the same pixel number as an input picture signal, and was band-limited, and can give the subtraction input of the subtractor 27. From the subtractor 27, said interpolation signal is subtracted from an input picture signal, the signal of only a high-frequency component is made, and it is given with it to the coding equipment 21. Thereby, the hierarchy division of low resolution compression coded data and the high resolution difference compression coded data is carried out, and the input picture signal incorporated as contents is accumulated. That is, the low resolution compression coded data to which the quality of the picture was lowered is accumulated as distributes data for trial offer, and the difference compression coded data (difference data) of high resolution and a low resolution is accumulated as distributes data at the time of formal purchase. These two data is connected and is stored as a pair of data.

[0079]If the sending-out request from a contents user is inputted into the controller 24, low resolution compression coded data will be first distributed as distributes data for trial offer of applicable contents. Here, user ID is published and it is added to distributes data. If formal purchase is decided and a sending-out request and user ID are inputted, the low resolution compression coded data distributed previously and the difference data which has a pair of relation will be distributed as distributes data at the time of formal purchase. By this embodiment, user ID is used in order to manage that the trial offer distributes data and difference data which have been distributed other than the managing a registrant purpose are a pair. When renewal of contents occurs, each old and new distributes data for trial offer and difference data are prepared, and the difference data created at the same stage as the distributes data for trial offer which a contents user has is distributed.

[0080]The contents user can obtain a low resolution picture by decoding the low resolution compression coded data which is distributes data for trial offer. When difference data is obtained by formal purchase, high resolution images can be obtained by decoding and adding low resolution compression coded data and difference data.

[0081]Next, in Embodiment 2, the flow of a series of work from trial offer to formal purchase is explained using the flow chart of drawing 9. However, work contents and an order change with actual system management.

[0082]First, the contents user 13 accesses the homepage of the contents bank 11, and performs search for contents acquisition (Step 301). By the result of this search, the contents user 13 chooses the purchase of contents, trial, or either [not carrying out]. For example, the selection picture of "it purchases", "it trying", "not carrying out", etc. is displayed for contents after the end of search.

[0083]When there is a response from the contents user 13 to this, the contents of selection are judged (Step 302). When the contents user's 13 selection is "purchasing", user ID is published (Step 303) and all the data of contents is distributed (Step 304). In this case, both low resolution compression coded data and difference data are distributed simultaneously. When the contents user's 13 selection is "trying", user ID is published (Step 305) and the low resolution compression coded data for trial offer is distributed (Step 306). And it is checked whether as opposed to the contents user 13, the volition of purchase is by transmitting the selection picture of "it purchases", "not carrying out", etc. about contents after fixed time progress, or there is nothing.

[0084]When there is a response from the contents user 13 to this, the contents of selection are judged (Step 307). When the contents user's 13 selection is "purchasing", user ID is checked (Step 308) and a pair of difference data is distributed as distributes data at the time of formal purchase (Step 309). After distributing data at Step 304 and Step 309, predetermined accounting, such as collection of use expense, is performed (Step 310).

[0085]In this Embodiment 2, since it is only difference data, compared with Embodiment 1, the amount of distributes data of distribute [at the time of formal purchase] decreases, and it can lower the communication cost at the time of formal purchase. Also in the case of voice data, this embodiment is applicable.

[0086][Embodiment 3] Drawing 10 is a block diagram showing the composition in the case of enciphering and distributing difference data at the time of formal purchase. Identical codes show drawing 8 and the equivalent portion of Embodiment 2.

[0087]In this Embodiment 3, processing until it accumulates the contents incorporated from the content registrant 12 in the contents database 17 is the same as Embodiment 2.

[0088]Although low resolution compression coded data is first sent as distributes data for trial offer and he is trying to send difference data subsequently to the time of formal purchase in Embodiment 2 described previously, He is trying to distribute the difference data enciphered as low resolution compression coded data as distributes data for trial offer in this Embodiment 3. This enciphered difference data is created as follows, for example. First, user ID is published by the sending-out request from a contents user, and the key generation means 28 generates a cryptographic key based on this user ID (it differs each time). This cryptographic key is matched with user ID, and is registered. And when sending distributes data to a contents user, low

resolution compression coded data and the difference data which has a pair of relation are taken out, and it enciphers by the encoding means 29 based on said cryptographic key. And the difference data enciphered as said low resolution compression coded data via the multiplexer 30 is distributed as distributes data.

[0089]Although the contents user can obtain a low resolution picture by decoding the sent distributes data, since it is enciphered, high resolution images cannot be obtained. And if formal purchase is decided and a sending-out request and user ID are inputted, the cryptographic key corresponding to user ID will be distributed as distributes data at the time of formal purchase. The contents user can obtain high resolution images by decoding difference data using the sent cryptographic key, and adding with low resolution compression coded data.

[0090]Next, in Embodiment 3, the flow of a series of work from trial offer to formal purchase is explained using the flow chart of drawing 11. However, work contents and an order change with actual system management.

[0091]First, the contents user 13 accesses the homepage of the contents bank 11, and performs search for contents acquisition (Step 401). By the result of this search, the contents user 13 chooses the purchase of contents, trial, or either [not carrying out]. The contents bank 11 judges the contents user's 13 contents of selection (Step 402). When the contents user's 13 selection is "purchasing", user ID is published (Step 403) and all the data of contents is distributed (Step 404). In this case, both low resolution compression coded data and difference data are distributed simultaneously, without enciphering, or encryption data is distributed with a cryptographic key. When the contents user's 13 selection is "trying", user ID is published (Step 405) and the difference data enciphered as the low resolution compression coded data for trial offer is distributed (Step 406). And it is checked whether as opposed to the contents user 13, the volition of purchase is by transmitting the selection picture of "it purchases", "not carrying out", etc. about contents after fixed time progress, or there is nothing.

[0092]When there is a response from the contents user 13 to this, the contents of selection are judged (Step 407). When the contents user's 13 selection is "purchasing", user ID is checked (Step 408) and the cryptographic key corresponding to user ID is distributed as distributes data at the time of formal purchase (Step 409). After distributing data at Step 404 and Step 409, predetermined accounting, such as collection of use expense, is performed (Step 410).

[0093]In this Embodiment 3, since it is only encryption data, compared with Embodiment 1 and Embodiment 2, the amount of distributes data of distribute [at the time of formal purchase] decreases more, and it can lower further the communication cost at the time of formal purchase. Also in the case of voice data, this embodiment is applicable.

[0094][Embodiment 4] Although the embodiment mentioned above explained the case where contents were image data to the example, the case where contents are voice data is made into an example, and it explains here.

[0095]Drawing 12 is a block diagram showing the composition in the case of making trial offer of the low-pass sound voice data of the voice data. While the voice data incorporated as contents is divided into the subband of 32 by the subband dividing filter 31, frequency analysis is conducted by FFT32 and the low-pass level of the frequency used as an object for trial offer through a mental auditory model is set up. And in the quantizer 33, it is quantized for each [which was divided with the subband dividing filter 31] subband of every. Here, it is set up by what bit it quantizes for every zone, high region levels are many numbers of bits, and a low-pass level is quantized with the small number of bits. These data is stored in the contents database 17 via the hierarchization formatting means 34. Thereby, voice data is divided and accumulated, for example in two hierarchies of the high-pass sound voice data as AM radio or the low-pass sound voice data of the tone quality not more than it, and distributes data at the time of formal purchase as an object for trial offer. The flow from trial offer to a contents user to formal purchase applies to drawing 9 correspondingly. High-pass sound voice data is distributed at the time of formal purchase.

[0096]The playing data (MIDI etc.) which uses the source of an electronic sound is also contained in the voice data as contents. The trial providing means which performed quality restrictions is realizable by using as the distributes data for trial offer data and the data without

an effect which reduced the number of tones to such data, and distributing perfect data at the time of formal purchase.

[0097]Next, the trial providing means which gave the trial providing means and limited time offer which gave contents limitation is explained briefly.

[0098]The data in which the portion of the climax or lack time (silent part) exists as a trial providing means which gave contents limitation if it is voice data, for example, and the data in which a missing part (lack pixel) exists if it is image data are created, and let this be distributes data for trial offer. The program which performs restriction when number-of-times restrictions (2 times and a file will not open if it sees once), and a copy are improper (reuse is impossible) is added into data, and it is possible to make this into the distributes data for trial offer etc.

[0099]The inside of a trial employment period supposes that it is available by obtaining attestation based on user ID via a network as a trial providing means which gave the limited time offer, for example. Or adding into data the program which checks the expiration date etc. can think, and it is *****.

[0100]It not only can carry out independently the quality restrictions, the contents limitation, and the limited time offer which were mentioned above, but it can carry them out combining these, respectively.

[0101]As mentioned above, use as the distributes data for trial offer the data which restricted quality restrictions, contents limitation, a limited time offer, etc. to a picture/voice data, and it is distributed to a contents user, In a contents user by distributing the data of which the data or restriction that those restrictions were canceled after fee collection is canceled, Since the searched contents become possible [judging more objective whether they are contents made into the purpose], the environment which makes new contents more smoothly is realizable.

[0102]
[Effect of the Invention]As explained above, according to this invention contents information distribution system. Only a fixed memory complement pulls out and uses the picture which is contents of the information as a right, Since the usage fee is saved free [a drawer] as right information data at the right holder at ***** according to the using form, and the third party should just pay it when required, it can respond to expansion-ization of the information dispatch expected from now on effectively.

[0103]It can be satisfied with managing so that processing, edit, etc. may be performed to original contents and the fee of the registered contents may be especially paid to a content registrant of desire of a content registrant's self-actualization etc., and new creation volition can be evoked by it. By supplying high quality contents to a contents user, circulation of various contents work becomes smooth and the AV content distribution system of information corresponding to the network age can be realized.

[0104]By what is managed so that the data which restricted quality restrictions, contents limitation, a limited time offer, etc. to especially a picture/voice data may be distributed to a contents user and those restrictions may be canceled after fee collection. In a contents user, since it can be judged now whether the searched contents are contents made into the purpose more objective, new contents can be made more smoothly.

[Translation done.]

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1]The block diagram showing the embodiment of a contents information distribution
system notionally.
[Drawing 2]The block diagram showing the entire configuration of an AV content distribution
system of information.
[Drawing 3](a) – (c) is an explanatory view showing an example of the contents sent by the
content registrant.
[Drawing 4](a) and (b) are the explanatory views showing the information on the parts-ized
contents.
[Drawing 5]The flow chart which shows a series of work flows from work of the contents by a
content registrant to contents bank registration.
[Drawing 6]The flow chart which shows a series of flows from acquisition of the contents by a
contents user to fee collection.
[Drawing 7]The block diagram showing the composition in the case of making trial offer of the
compression coded data of a low resolution.
[Drawing 8]The block diagram showing the composition in the case of distributing only the
difference data of high resolution and a low resolution at the time of formal purchase.
[Drawing 9]The flow chart which shows a series of work flows from trial offer to formal purchase
in Embodiment 2.
[Drawing 10]The block diagram showing the composition in the case of enciphering and
distributing difference data at the time of formal purchase.
[Drawing 11]The flow chart which shows a series of work flows from trial offer to formal
purchase in Embodiment 3.
[Drawing 12]The block diagram showing the composition in the case of making trial offer of the
low-pass sound voice data of the voice data.
[Description of Notations]
1 Creation means
2 Work means
3 Memory measure
4 Transmission means
5 Displaying means
10 AV content distribution system of information
11 Contents bank
12 Content registrant
13 Contents user
14 Financial institution
15 Network
16 Content registrant management data base
17 Contents database
18 Contents user management data base

[Translation done.]